

Highway 1 Realignment Project

Mendocino County, California

01-MEN-1-(PM 38.38-38.92)

EA 01-47480

Focused Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation
October 2008

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project located in Mendocino County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do?

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans District 3 Office of Environmental Management (S-4) located at 2389 Gateway Oaks Drive, Room 100, Sacramento, CA 95833 and at the Mendocino Library 10591 William Street, Mendocino, CA 95460
- We welcome your comments. If you have any concerns regarding the proposed project, send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

Mr. Lupe Jiménez
Environmental Branch Chief
California Department of Transportation
P.O. Box 942874
Sacramento, CA 94274-0001

Submit comments via e-mail to: Lupe.Jimenez@dot.ca.gov
Submit comments by the deadline: November 26, 2008.

What happens next?

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Lupe Jiménez, Environmental Branch Chief, California Department of Transportation, P.O. Box 942874, Sacramento, CA 94274-0001; (916) 274-0584 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

SCH:
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Highway 1 Realignment Project
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FOCUSED INITIAL STUDY with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

10/24/08
Date of Approval



John Webb, Chief
Chief, Office of Environmental Services
North Region Environmental Planning
California Department of Transportation

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans), in conjunction with the Federal Highway Administration (FHWA), proposes to realign a section of Highway 1 that was damaged during the 2005/2006 storms in Mendocino County. The project is located in Mendocino County on Highway 1 near Albion between post mile (PM) 38.38 and 38.92. The scope of this project consists of realigning the roadway to the east and decommissioning the existing roadway. The asphalt concrete (AC) and aggregate base of the decommissioned roadway will be removed. Drainage work will consist of removal and relocation of culverts with placement of rock slope protection at the outlets.

Determination

This Proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision regarding the project is final. This Mitigated Negative Declaration is subject to modification based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on visual aesthetics, agricultural resources, air quality, cultural resources, floodplain, geology/soils, land use/planning, mineral resources, noise, population/housing, hazardous materials, public services, recreation, transportation/traffic, or utilities/service systems.

In addition, the proposed project would have no significant effect on hydrology/water quality.

In addition, the proposed project would have no significantly adverse effect on Biology because the following mitigation measures would reduce potential effects to insignificance:

- Wetlands in the project area cannot be avoided due to the need to realign Highway 1 for safety reasons and to fulfill the project's purpose and need. Permanent impacts will most likely be mitigated on site at a minimum of 1:1 ratio, or if not then by off-site mitigation or by participating in an in-lieu fee program or other program deemed acceptable by the California Coastal Commission and the United States Army Corps of Engineers.
- Restoration for riparian habitat, temporarily affected wetlands, and other temporarily affected waters of the US will occur on-site at a minimum of 1:1 ratio, or other ratio deemed appropriate by the USACE and the California Coastal Commission.

John D. Webb
Chief, Office of Environmental Services
North Region Environmental Planning
California Department of Transportation

Date

Initial Study

Project Title

Highway 1 Realignment Project MEN 1 PM 38.38-38.92

Lead Agency Name, Address and Contact Person

California Department of Transportation, District 3
2389 Gateway Oaks Drive, Suite 100, Sacramento CA 95833
Mr. Lupe Jimenez, Environmental Branch Chief S-4
Phone (916) 274-0557

Project Location

The California Department of Transportation (Caltrans), in conjunction with the Federal Highway Administration (FHWA), proposes repairs to Highway 1 as a result of the 2005/2006 storms in Mendocino County. The project is located in Mendocino County on Highway 1 near Albion between post mile (PM) 38.38 and 38.92.

Project Sponsor's Name and Address

John Webb, Chief, North Region Environmental Management Services
California Department of Transportation, District 3
2389 Gateway Oaks Drive, Suite 100, Sacramento CA 95833

Purpose

The purpose of this realignment is to stabilize the roadway by retreating Highway 1 east from the failure area.

Need

This project is needed to maintain the mobility performance of Highway 1 from PM 38.38 to PM 28.92 that has failed due to saturation from heavy winter rains.

Description of Project

During the winter of 2006 heavy rainfall saturated the coastal bluff on which Route 1 runs, causing approximately 1,500 feet of Route 1 to fail. Onsite inspection showed extensive cracking and roadway subsidence. In general, the slope appears to be moving downward and westerly toward the ocean. The purpose of this realignment is to stabilize the roadway by retreating eastward away from the failure area. This project proposes to realign the roadway by retreating to the east of the current alignment from 0 to approximately 100 feet. The new alignment will include 12-foot lanes and 4-foot shoulders. Maximum cut and fill slopes will range from approximately 2:1 to 3:1. The existing roadway, where no longer needed, will be excavated to a depth of five feet and the area re-graded and planted. The asphalt concrete (AC) and aggregate base of the decommissioned roadway will be removed and either sent to a recycle facility or an approved disposal site. The top soil layer in the new alignment will be removed and stored and then spread over the regarded decommissioned roadway to preserve seed stock and other soil organisms. Drainage work will include installation of new culverts where needed and the removal of existing culverts and restoration of existing drainage as part of the decommissioning of the existing roadway. The new drainage structures will generally be aligned with the existing drainage structures. Rock slope protection at the new culvert outlets

will be installed as needed. Existing utilities (phone and electricity) will be relocated as needed. New right of way fencing will be constructed along the new right of way alignment.

Surrounding Land Uses and Setting

The project area is approximately 6 feet above sea level overlooking the Pacific Ocean in Mendocino County. The community of Elk is located 3.5 miles south of the project area and Point Arena is approximately 19 miles south of the project area. Views within the project area range from expansive views westward of the Pacific Ocean, the coastal bluffs to the north and south and the Coast Range which rises above the shoreline to the east.

The cold waters of the Pacific Ocean moderate the climate along the coast. Summers are often foggy and cool with daily high temperatures ranging from the mid-60s Fahrenheit during the day to the 50s F at night. Although there is little rainfall during summer, dense fog often coats everything with a light covering of moisture. Winters are slightly cooler and often rainy. Temperatures range from 50s F during the day and 40s F at night. The area receives an average of 40.8 inches of rainfall annually most of which occurs between October and April.

Vegetation coverage within the project area is classified as the coastal prairie plant community which includes mostly perennial bunch grasses with other herbaceous plants common on the landscape. Most of the shrubs and trees including cypress and shore pine visible in the project area were planted by local residents and are not native to the coastal bluff ecosystem. The forest edge is visible in the middle and background. To the north, riparian woodlands which include redwood, Douglas fir, big leaf maple, willow, and alder follow the major stream corridors and the redwood forest is visible farther inland towards the east. The area is residential and agricultural.

Permits and Approvals Needed

The following environmental permits are required for the project:

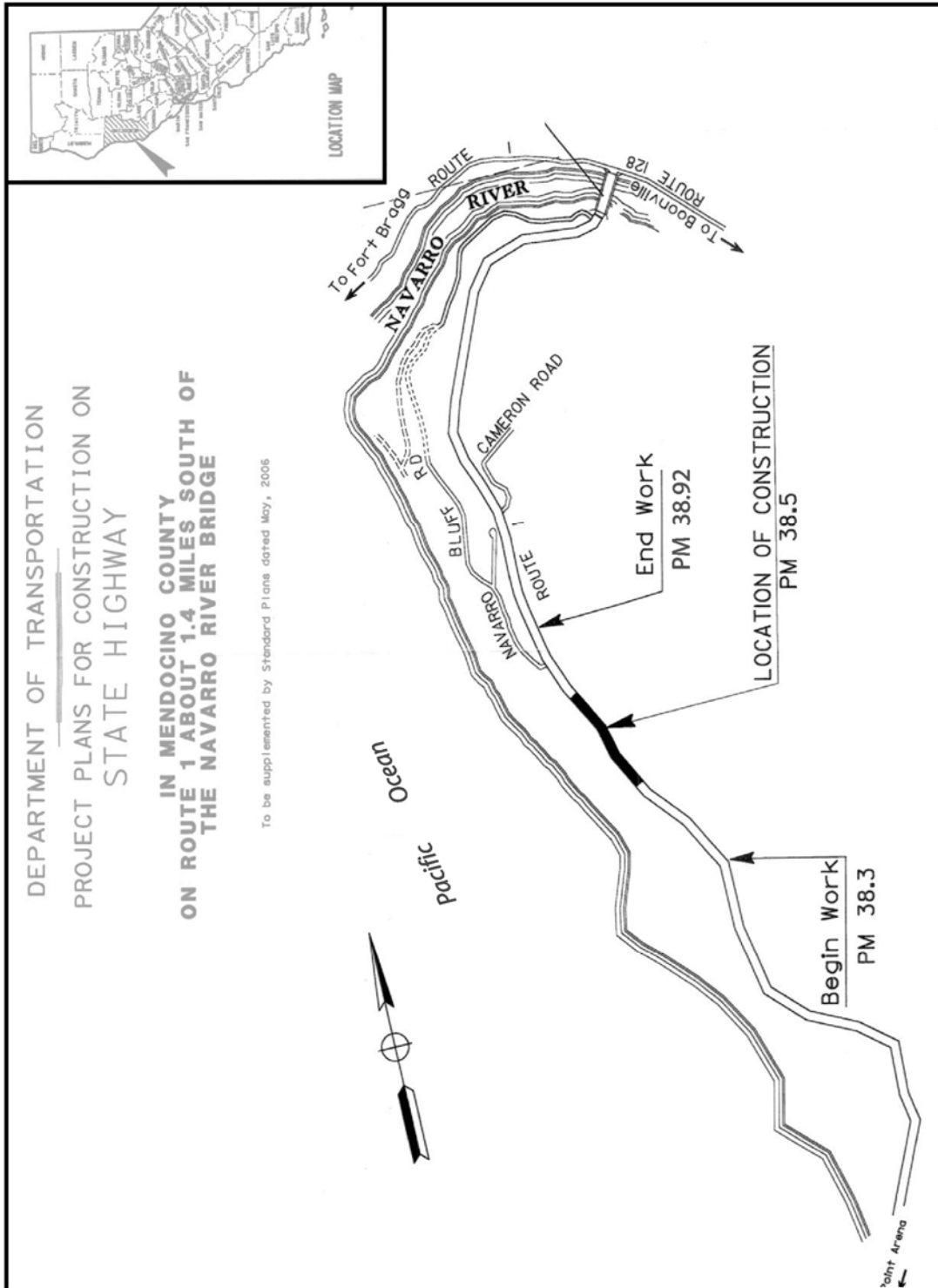
- A Coastal Development Use Permit from the County of Mendocino
- A 401 Water Quality Certification from the North Coast Regional Water Quality Control Board
- A Section 404 Nationwide permit #14 from the U.S. Army Corps of Engineers
- A Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game
- Notice of Construction (NOC) filed for the CA Construction General Permit
- Caltrans Statewide NPDES Permit

Zoning

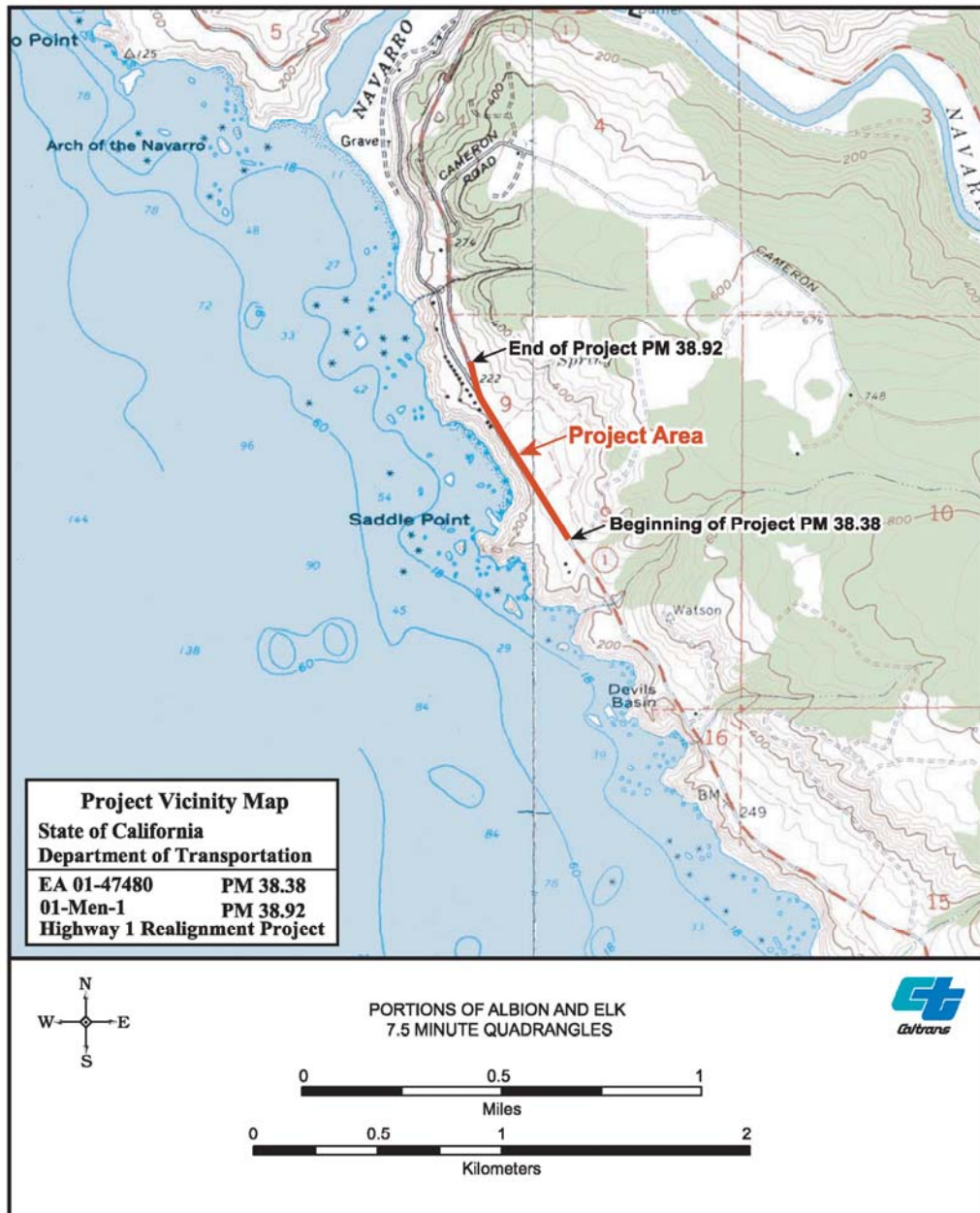
The proposed project parcel is zoned, code sec. 20-540 Variances¹

¹ A variance is an exception from zone restrictions granted by the Coastal Permit Administrator upon application when, because of special circumstances applicable to the property, including size, shape, topography, location, or surroundings, the strict application of the zoning ordinance deprives the property of privileges enjoyed by other property in the vicinity and under identical zoning classification. Variances shall not be granted to authorize uses or activities which are not otherwise expressly authorized by the regulations of this Division. (Ord. No. 3785 (part), adopted 1991)

Project Location Map



Project Vicinity Map



Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Less than significant impacts with mitigation” as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics
<input type="checkbox"/>	Agricultural Resources
<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources
<input type="checkbox"/>	Cultural Resources
<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Hazards and Hazardous Materials
<input checked="" type="checkbox"/>	Hydrology/Water Quality
<input type="checkbox"/>	Land Use/Planning
<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population/Housing
<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Utilities/Service Systems
<input type="checkbox"/>	Mandatory Findings of Significance

Impacts Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of Biological and Water Quality issues relating to this project.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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I. AESTHETICS — Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?
Hydro-seeding/mulching is to used where necessary to minimize storm water impacts. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determination in this section is based on the Visual Impact Assessment, February 2007.

II. AGRICULTURE RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

“No Impact” determinations in this section are based on various field reviews in 2007 and 2008.

III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute | | | | |

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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substantially to an existing or projected air quality violation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Expose sensitive receptors to substantial pollutant concentrations?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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This project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) §93.126, subsection Other (“Repair of damage caused by natural disasters...”). No further analysis is required.

The proposed project is re-aligning Highway 1 by constructing a two lane highway to replace the old two lane alignment and therefore is not capacity increasing and will not increase operational CO2 emissions.

IV. BIOLOGICAL RESOURCES — Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Biological/Coastal section of this Initial Study.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Natural Environmental Study (NES), June 2008.

V. CULTURAL RESOURCES — Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Disturb any human remains, including those interred outside of formal cemeteries?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Historic Property Survey Report, May 2008.

VI. GEOLOGY AND SOILS — Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No Impact” determinations in this section are based on the Geotechnical Preliminary Recommendation Report, May 2008.

VII. HAZARDS AND HAZARDOUS MATERIALS —

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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it create a significant hazard to the public or the environment?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determination in this section is based on review of the Initial Site Assessment, December 2006.

VIII. HYDROLOGY AND WATER QUALITY — Would the project:

a) Violate any water quality standards or waste discharge requirements?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Water Quality and Storm Water Runoff section of this Initial Study.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Water Quality and Storm Water Runoff section of this Initial Study.

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Water Quality and Storm Water Runoff section of this Initial Study.

f) Otherwise substantially degrade water quality?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion of impacts starts at the Water Quality and Storm Water Runoff section of this Initial Study.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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j) Result in inundation by a seiche, tsunami, or mudflow?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Water Quality report, September 2008.

IX. LAND USE AND PLANNING — Would the project:

a) Physically divide an established community?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Conflict with any applicable habitat conservation

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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plan or natural community conservation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Community Impacts technical memorandum, July 2007.

X. MINERAL RESOURCES — Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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XI. NOISE — Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Noise Study Report, May 2007.

XII. POPULATION AND HOUSING — Would the project:

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Community Impacts technical memorandum, July 2007.

XIII. PUBLIC SERVICES —

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Police protection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Schools?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Parks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Other public facilities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on the Community Impacts technical memorandum, July 2007.

XIV. RECREATION —

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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“No Impact” determinations in this section are based on the Community Impacts technical memorandum, July 2007.

XV. TRANSPORTATION/TRAFFIC — Would the project:

a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

“No Impact” determinations in this section are based on conversations with the CIA Specialist, August 2008.

XVI. UTILITY AND SERVICE SYSTEMS — Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
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c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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g) Comply with federal, state, and local statutes and regulations related to solid waste?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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“No Impact” determinations in this section are based on conversations with Project Engineer, August 2008.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE —

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Does the project have environmental effects that

will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment, Environmental Consequences, and Mitigation Measures

Biological Resources

Regulatory Setting

Because the proposed project is located adjacent to the Pacific Ocean, there are several federal, state, and local agencies that have jurisdiction over the project site. The Clean Water Act (CWA) established the basic mandates for regulating discharges of pollutants into the waters of the United States. The CWA set requirements for water quality standards for all contaminants in surface waters. In 1999, the State Water Resources Control Board (SWRCB) issued a National Pollution Discharge Elimination System (NPDES) Permit (NPDES NO. CAS000003) that regulates storm water discharges from Caltrans facilities. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States.

Upon completion of the final design for this project, the North Coast Regional Water Quality Control Board and Mendocino County Planning Department will be contacted to obtain their jurisdictional permits or approvals. A Notice of Construction will be filed a minimum of 30-days prior to construction to obtain coverage for the project under the California Construction General Permit (General Permit NO. CAS000002) statewide NPDES permit.

WETLANDS AND OTHER WATERS

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by

the U.S. Army Corps of Engineers (USACE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If DFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act.

Affected Environment

The highway cross-culverts located at PM 38.65 and 38.73 drain two un-named intermittent tributaries into the Pacific Ocean. The current project proposes to remove the existing roadway between PMs 38.38 and 38.92 with the associated cross culverts and construct a new realigned road approximately 100 ft to the east. At this location, Highway 1 runs through a marine terrace bordered by a coastal bluff and coastal mountains. Both *Gilia capitata ssp Pacifica* (Globe Gilia) and *Castilleja mendocinensis* (Mendocino Coast Indian Paintbrush) are California Native Plant Society List 1B species which have been reported as occurring inside the Environmental Study Limits (ESL's) based upon the CNDDB (attachment 2). During field investigations throughout the flowering season only *Castilleja mendocinensis* was found within the ESL.

The proposed storm damage repair project will result in effects to vegetation communities in which sensitive plant species occur. Surveys for special status plant species have been conducted monthly throughout the flowering season in 2008. The

CDFG is being consulted to insure that potential impacts to CNPS List 1B plants are avoided or minimized, and that project activities do not inhibit long-term conservation efforts for the survival of special status plant species.

Implementation of the proposed storm damage repair project would result in the temporary disturbance and permanent loss of riparian and grassland that provides potential breeding and foraging habitat for a number of bird species protected under the Migratory Bird Treaty Act, or classified as California species of special concern, California fully protected species, or breeding raptors (See Attachment 1). The removal of woody shrubs (coyote bush; *Baccharis pilularis* and Willow; *Salix sp.*) may be required for the removal and realignment of the existing roadway.

Potential Impacts

The highway cross-culverts located at PM 38.65 and 38.73 drain un-named intermittent streams directly into the Pacific Ocean. The intermittent streams are connected by a wetland (Wetland #1) which occupies depressions surrounding an area of persistent bedrock uplands. Another wetland located within the Environmental Study Limit (Wetland #2), will not be impacted (Attachment 3). The current project proposes realigning the highway such that the new highway will cross these streams and associated wetlands approximately 100 feet further east than the current path of the highway. The proposed action will result in permanent impacts and temporary impacts to Wetland # 1 and both un-named intermittent streams located at PM 38.65 and 38.73 (See Table 1 and Attachment 3 for impacts).

Temporary impacts at this site include areas between the existing road and the proposed realignment where construction work will occur on both sides. Some minimal impacts are expected to occur in these areas because of the extent and close proximity of the proposed realignment work. These impacts may include, but are not limited to, changes in hydrologic flow during construction, minimal infiltration of particulate matter (dust) created during construction, the removal of nearby vegetation, and altered wildlife usage patterns.

The proposed action will result in temporary impacts to approximately 98 linear feet of culverted intermittent stream, 100 linear feet of natural flowing intermittent stream as well as permanent impacts to 121 linear feet of natural flowing intermittent stream. The realignment will result in the placement of 810 cubic yards of fill in the stream and the adjacent wetlands located at PM 38.65 and at PM 38.73. The intermittent stream and adjacent wetlands will have 130 cubic yards of excavation removed and will have 2 cubic yards of fill added during construction.

Table 1: Wetland and other Waters of the US impacts.

	PM 38.65	PM 38.73	Total
Permanent Riparian Wetland Impacts	1,154 ft ²	0 ft ²	1154 ft ²
	0.027 acre	0 acre	0.027 acre
Temporary Riparian Wetland Impacts	3,261 ft ²	0 ft ²	3,261 ft ²
	0.075 acre	0 acre	0.075 acre
Permanent Wetland Impacts	1,515 ft ²	1,217 ft ²	2,732 ft ²
	0.035 acre	0.028	0.063 acre
Temporary Wetland Impacts	94 ft ²	331 ft ²	425 ft ²
	0.002 acre	0.008 acre	0.01 acre
Culverted Stream Impacts	50 linear ft	48 linear ft	98 linear ft
Permanent Naturally Flowing Stream Impacts	75 linear ft	25 linear ft	100 linear ft
Temporary Naturally Flowing Stream Impacts	64 linear ft	57 linear ft	121 linear ft

Avoidance and Minimization

The following measures will be required for the project.

1: Establish Environmentally Sensitive Areas

- Sensitive natural resource features occurring outside of the expected construction impact area will be avoided or minimized by designating these features as “environmentally sensitive areas” (ESAs) on project plans and in project specifications.
- ESA information will be shown on contract plans and discussed in the Special Provisions. ESA provisions may include, but are not limited to, the use of temporary orange fencing to delineate the proposed limit of work in areas adjacent to sensitive resources, or to delineate and exclude sensitive resources from potential construction impacts.
- Contractor encroachment into ESAs will be restricted (including the staging/operation of heavy equipment or casting of excavation materials). ESA provisions shall be implemented as a first order of work, and remain in place until all construction activities are complete.

2: Comply with Migratory Bird Treaty Act (MBTA)

- Implementation of the proposed storm damage repair project would result in the temporary disturbance and permanent loss of wooded and grassland that provides potential breeding and foraging habitat for a number of bird species protected under the MBTA, or classified as California species of special concern, California fully protected species, or breeding raptors. The following measures are recommended to reduce project impacts on bird species:

- Minimize removal of native vegetation by locating staging areas and access routes in previously disturbed areas and establishing ESAs;

3: Restrict Timing of Vegetation Removal

- If feasible, removal of vegetation shall be conducted in the fall and winter (between September 1st and February 14th) after fledging and before the initiation of breeding activities.

4: Pre-Construction Nesting Bird Surveys

- If vegetation removal during migratory (non-nesting season is determined unfeasible, then pre-construction bird nest surveys shall be performed in spring to determine the location of nest sites within the proposed storm damage repair project areas.
- If active bird nests are found, Caltrans shall consult with USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918, and with CDFG to comply with provisions of the Fish and Game Code of California.
- If a lapse in project related work of fifteen (15) days or longer occurs, another survey and, if required, consultation with USFWS and CDFG will be required before the work can be reinitiated.

5: Minimize Disturbance to Jurisdictional Waters

- All waters and wetlands adjacent to the construction zone that will not be filled as a result of the project will be designated as ESAs, and shall be fenced and signed to assure no inadvertent damage to these resources will occur.
- Disruption of the wetlands, streambeds, and adjacent riparian corridors will be minimized, and vegetation removal shall be limited to the absolute minimum amount required for construction.

6: On-site Restoration for all Riparian Habitat, Temporarily Affected Wetlands, and Other Temporarily Affected Waters of the US

- Restoration for riparian habitat, temporarily affected wetlands, and other temporarily affected waters of the US will occur on-site at a minimum of 1:1 ratio if not then by off site mitigation or by participating in an in-lieu fee program or other program deemed acceptable by the California Coastal Commission and the United States Army Corps of Engineers. The North Coast RWQCB also regulates riparian and wetland habitat through the 401 Certification.

7: Containment Measures / Best Management Practices

- Caltrans Standard Specifications require the contractor to submit a Storm Water Pollution Prevention Plan (SWPPP). This plan must meet the standards and objectives to minimize water pollution impacts set forth in section 7-1.01G of Caltrans Standard Specifications. These standards/objectives are at times referred to as Best Management Practices

(BMPs).

- Measures will be employed to prevent any construction material, debris, or petroleum products associated with equipment from entering surface waters. BMPs for erosion control will be implemented and in place prior to, during, and after construction in order to prevent silt, sediment, backfill, or petroleum products from entering surface waters.

The SWPPP must also be in compliance with the goals and restrictions identified in the State Water Quality Control Board's Basin Plan for the project area.

Mitigation Measures

Wetlands in the project area cannot be avoided due to the need to realign Highway 1 for safety reasons and to fulfill the project's purpose and need. Permanent impacts will most likely be mitigated on site at a minimum of 1:1 ratio, or if not then by off site mitigation or by participating in an in-lieu fee program or other program deemed acceptable by the California Coastal Commission, and the United States Army Corps of Engineers, and the North Coast RWQCB.

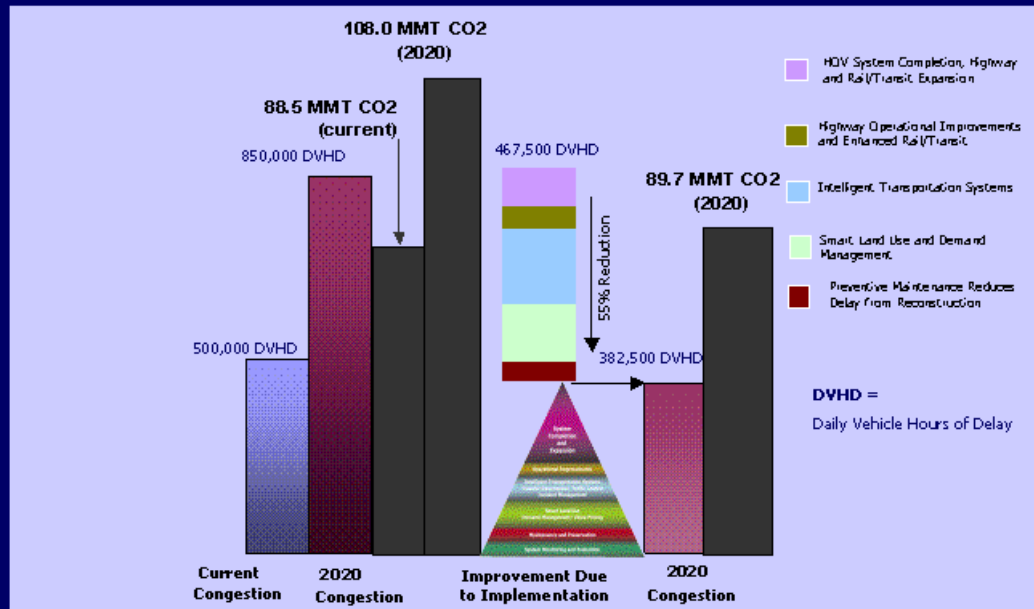
CLIMATE CHANGE

Regulatory Setting

The proposed project is stabilizing and re-aligning Highway 1 by constructing a two lane highway to replace the existing failed two lane alignment and therefore is not capacity increasing and will not increase operational CO2 emissions. This proposed project would therefore have low to no potential for climate change impacts.

The Department continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan (SGP) calls for a \$222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$107 in transportation funding during the next decade. As shown on the figure below, the SGP targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The SGP proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The SGP relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

Outcome of Strategic Growth Plan



Conceptual Framework for Reducing Congestion that Needs to be Verified Through Experience

* Numbers reflect SHWY system

WATER QUALITY AND STORM WATER RUNOFF

Regulatory Setting

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (Corps) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within

California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB adopted a Statewide NPDES Permit to regulate storm water discharges from all Department owned rights-of-way, properties, facilities and activities. Department construction projects are regulated under the California Construction General Permit and the Department's Statewide NPDES Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Department activities less than 1 acre are required to develop a Water Pollution Control Program in accordance with the Department's Standard Specifications.

Affected Environment

For the purpose of this project, the water quality study limits are located on State Route 1 from PM 38.38-38.92. All locations are in the Mendocino Coast Hydrologic Unit (HU), Point Arena Hydrologic Area (HA), Greenwood Creek Hydrologic Sub-Area (HSA) 113.61. The location is within the jurisdictional boundary of the North Coast Regional Water Quality Control Board (Regional Board). The Regional Board has the authority to implement water quality protection standards through the issuance of permits to protect waters of the State of California. Water Quality Objectives for the North Coast Region are specified in the Water Quality Control Plan for the North Coast Region (Basin Plan) prepared in compliance with the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of both surface waters and groundwater.

The receiving waters for the project limits are coastal wetlands, and an unnamed tributary to the Pacific Ocean, which discharges to the Pacific Ocean. The beneficial uses of any specifically identified water body generally apply to all its tributaries. The project lies within the Greenwood Creek Hydrologic Sub-Area (HSA). The beneficial uses for the Greenwood Creek HSA as listed in the Basin Plan are the following:

- Municipal and Domestic Supply (existing)
- Agricultural Supply (existing)
- Industrial Service Supply (existing)
- Groundwater Recharge (existing)
- Freshwater Replenishment (existing)
- Navigation (existing)
- Water Contact Recreation (existing)
- Non-Contact Recreation (existing)
- Commercial and Sport Fishing (existing)
- Cold Freshwater Habitat (existing)
- Wildlife Habitat (existing)
- Rare, Threatened, or Endangered Species (existing)
- Migration of Aquatic Organisms (existing)

- Spawning, Reproduction, and/or Early Development (existing)
- Aquaculture (existing)

The receiving waters are not included on the Clean Water Act 303(d) list for impairments associated with excessive sediment and high temperatures.

The North Coast RWQCB's 401 Certification Application requires a storm water treatment BMP feasibility plan to fulfill Non-Compensatory Mitigation requirements for all projects that impact riparian vegetation. The application requests the methods proposed to treat storm water runoff from the project site prior to entering the storm drainage system, wetlands, streams, etc, and to include proper design calculations to indicate that the proposed methods will treat runoff from the 85th percentile/24-hour storm event.

Potential Impacts

The Pacific Ocean, coastal wetlands and an unnamed tributary to the Pacific Ocean are the receiving waters for this project. There are jurisdictional drainages within the project limits; Section 401 Water Quality Certification / Waste Discharge Requirements or a waiver of Waste Discharge Requirements will be required. The project proposes to increase impervious surface, and therefore will generate an increase in storm water runoff. Given the existing and proposed storm water drainage systems within the project limits and the regional water quality concerns associated with this area, the following water quality concerns were identified related to the project: sediment and other discharges related to construction and operation, dredge, and fill impacts to the existing jurisdictional waters.

Avoidance and Minimization Measures

The primary constituent of concern for the project is sediment. During construction there could be temporary adverse impacts due to increased erosion that could transport sediment into receiving waters. However, the project will be constructed with necessary erosion and water quality control practices to minimize the potential for sedimentation through the use of construction BMPs identified in the Department's Water Quality Handbook, *Construction Site BMPs Manual*. The Department's approved construction BMPs applicable to this project include measures for temporary sediment control (e.g. silt fences, fiber rolls, straw bale barriers) and temporary soil stabilization (e.g. hydraulic mulching, hydroseeding, straw mulch). There is also a potential for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. An accidental release of these materials may pose a threat to water quality if contaminants enter the drainage system. A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident. The Department has contingency plans, procedures, and emergency response crews trained for incident response. These procedures designate a chain of command for notification, evacuation, response, and cleanup of spills resulting from the use and/or transport of hazardous materials.

The project will result in a disturbed soil area greater than one acre, and therefore shall be regulated under the Department's Statewide NPDES Permit, which includes by reference the Statewide Construction General Permit. A Notice of Construction (NOC) will be filed with the Regional Board a minimum of 30 days prior to construction to obtain coverage for the project under the Statewide Construction General Permit. To comply with the conditions of the Department's Statewide NPDES Permit, and to address the potential temporary water quality impacts resulting from construction activities, Standard Special Provision (SSP) 07-345 will be included as part of the Plans, Specifications, and Estimates. SSP 07-345 will address water pollution control work and implementation of a Storm Water Pollution Prevention Plan (SWPPP) during construction. Source control issues will be addressed through SSP 07-346, Construction Site Management that sets forth handling procedures and BMPs for potential sources not addressed by line items in the contract special provisions.

Mitigation Measures

No mitigation for Water Quality is required for this project.

COASTAL ZONE

Regulatory Setting

This project is in the coastal zone. The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs (LCPs). LCPs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals.

Affected Environment

Within the Mendocino County LCP, Chapter 20.496 of the coastal zoning code includes policies that apply to Environmentally Sensitive Habitat Area (ESHAs). Buffer areas are described and defined in section 20.496.020 as an area that shall be established adjacent to all ESHAs. The purpose of a buffer area shall be to provide for a sufficient area to protect the ESHA from degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game (if applicable), and Mendocino County Planning Department, that 100 feet is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the ESHA and shall not be less than 50 feet in width. This section describes a variety of standards for determining the allowable width of the buffer area, including standards for the determining the allowable width of the buffer area, including standards for development permitted within the buffer area. Mendocino County Code Section 20.496.025(7) further specifies development that is allowed in wetlands, including incidental public service purposes.

Potential Impacts

The highway cross-culverts located at PM 38.65 and 38.73 drain un-named intermittent streams directly into the Pacific Ocean. The intermittent streams are connected by a wetland (ESHA #1) which occupies depressions surrounding an area of persistent bedrock uplands. Another wetland is in the Environmental Study Limit (ESHA #2); however, it will not be impacted. The current project proposes realigning the highway such that the new highway will cross these streams and associated wetlands approximately 100 feet further east than the current path of the highway. The proposed project will result in permanent impacts and temporary impacts to ESHA # 1 and both un-named intermittent streams at PM 38.65 and PM 38.73 (Refer to Table 1 and Attachment 4). Temporary impacts at this site include areas between the existing road and the proposed realignment where construction work will occur on both sides. Some minimal impacts are expected to occur in these areas because of the extent and close proximity of the proposed realignment work. These impacts may include, but are not limited to, changes in hydrologic flow during construction, minimal infiltration of particulate matter (dust) created during construction, the removal of nearby vegetation, and altered wildlife usage patterns. ESHA #3 is located along the banks of the un-named intermittent stream at PM 38.65 adjacent to both sides of Highway 1. This area is characterized by having riparian vegetation consisting mainly of willows (*Salix lasiocarpus*) and elderberry (*Sambucus racemosa*). It encompasses 5,169 square feet (0.119 acre) and will have both permanent direct impacts (1,154 sq. ft / 0.027 acre) and temporary indirect impacts (3,261 sq. ft / 0.075 acre) due to construction activities. Impacts from construction may include, but are not limited to, the removal of vegetation, alteration of

hydrology, excavation, and placement of fill within this ESHA.

Avoidance, Minimization, and/or Mitigation Measures

All Avoidance, Minimization and Mitigation Measures are listed in the Biological Resources section.

List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Larry M. Chiea, Environmental Planner. Contribution: Environmental Study Coordinator and Document Writer.

Jennifer Heichel, Associate Environmental Planner. Contribution: Environmental Document Writer.

Lupe Jimenez, Senior Environmental Planner. Contribution: Environmental Branch Chief.

Erick Wulf, Associate Environmental Planner (Archaeology). Contribution: Historic Property Survey report.

Michael Cane, Environmental Planner (Natural Science). Contribution: Project Biologist, Natural Environmental Study (NES).

Eric Lund, Project Engineer. Contribution: Preparation of Design Plans.

Frank Demling, Project Manager. Contribution: Project Coordination.

Mark Melani, Transportation Engineer. Contribution: Hazardous Waste Initial Site Assessment.

Jim Hibbert, Landscape Architect. Contribution: Visual Impact Analysis.

Sharon Tang, Air/Noise Specialist. Contribution: Air Quality and Noise Reports.

Alex Arevalo, Civil Transportation Engineer. Contribution: Water Quality Analysis and NPDES Storm Water Coordinator.

Fernando Manzanera, Hydraulics Engineer. Contribution: Floodplain Study.

Aaron Mckee, Community Impact Analyst. Contribution: Community Impacts Study.

Troy Arseneau, Traffic Engineer. Contribution: Traffic Management Plan.

Marcia Kiese, Engineering Geologist. Contribution: Geotechnical Report.

Attachment 1

Regional Species of Concern

Sensitive Biological Resources Considered as Part of Environmental Review

Animals Potentially occurring 01-47480 Men 1 PM 38.5/38.8

Common Name Scientific Name	Legal Status*		Habitat Associations	Potential to Occur at the Project Site	Potential to be impacted by project
	Federal/State	Distribution			
Behren's silverspot butterfly <i>Speyeria zerene behrensii</i>	E/--	Pacific side of the Coast Ranges from Point Arena County to Cape Mendocino, Mendocino County	Habitats with larval food sources (violets) are required; specific habitat unknown	Low	Low, none seen during field investigations at project site
Lotis blue butterfly <i>Lycaeides argyrognomon lotis</i>	E/--	In and around a few sphagnum bogs near Mendocino, Mendocino County; Mendocino Pygmy Forest	Coastal peat bogs and pygmy conifer forest inland from coastal sand	None	None, no habitat present
Coho salmon Southern Oregon/California Coastal ESU <i>Oncorhynchus kisutch</i>	T/SC	Arctic and Pacific drainages from Point Hope, Alaska to Monterey Bay, California	Requires beds of loose, silt free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen.	None	None, intermittent streams inaccessible to migrating fish
Coho salmon Central California Coast <i>Oncorhynchus kisutch</i>	T/C	Punta Gorda in northern California south to and including the San Lorenzo River in Central California, tributaries to San Francisco Bay, excluding the Sacramento-San Joaquin River	Cool freshwater streams and rivers, require sand and gravel for	None	None, intermittent streams inaccessible to migrating fish

Animals Potentially occurring 01-47480 Men 1 PM 38.5/38.8

Common Name	Legal Status*			Potential to	
Scientific Name	Federal/State	Distribution	Habitat Associations	Occur at the Project Site	Potential to be impacted by project
Chinook salmon - Central valley spring-run ESU <i>Oncorhynchus tshawytscha</i>	T/--	Sacramento and San Joaquin Rivers and their tributaries	Spawns in deeper water and larger gravel sizes (cantaloupe) than other salmon. Most spawning and rearing activity take place in the main stream channels above the saltwater limit or hundreds of miles upstream.	None	None, intermittent streams inaccessible to migrating fish
Chinook salmon California Coast ESU <i>Oncorhynchus tshawytscha</i>	T/--	From the Redwood Creek in Humboldt County to the Russian River in Sonoma County	Spawns in deeper water and larger gravel sizes (cantaloupe) than other salmon. Most spawning and rearing activity take place in the main stream channels above the saltwater limit or hundreds of miles upstream	None	None, intermittent streams inaccessible to migrating fish
Steelhead Northern California ESU <i>Oncorhynchus mykiss</i>	T/SC	Coastal steelhead occur from Alaska to southern California	Cool freshwater streams and rivers, require sand and gravel for	None	None, intermittent streams inaccessible to migrating fish
Tidewater goby <i>Eucyclogobius newberryi</i>	PD/SC	Shallow water along Pacific coastal streams and lagoons.	On bottom or existing on submerged plants in shallow weedy areas of coastal lagoons and estuaries.	None	None, no habitat present

Animals Potentially occurring 01-47480 Men 1 PM 38.5/38.8

Common Name	Legal Status*			Potential to	
Scientific Name	Federal/State	Distribution	Habitat Associations	Occur at the Project Site	Potential to be impacted by project
Steelhead Central California Coast ESU <i>Oncorhynchus mykiss</i>	T/--	Russian River to Aptos Creek, and the drainages of San Francisco and San Pablo Bays eastward to the Napa River (inclusive), excluding the Sacramento-San Joaquin River Basin	Cool freshwater streams and rivers, require sand and gravel for	None	None, intermittent streams inaccessible to migrating fish
Leatherback turtle <i>Dermochelys coriacea</i>	E/	Worldwide in open oceans	Nests on tropical and sub-tropical sandy beaches	None	None, Habitat not present
Olive (=Pacific) ridley seas turtle <i>Lepidochelys olivacea</i>	T/	A wide ranging turtle on the open ocean, usually stays to the warmer parts of the Pacific and Indian oceans	Nests on beaches on the Pacific Coast from the tip of Baja Calif. to Northern Peru, as well as on other warmer coasts worldwide	None	None, Habitat not present
Loggerhead turtle <i>Caretta caretta</i>	T/	A wide ranging turtle on the open ocean, stays to the warmer parts of the ocean. Enters bays, lagoons, estuaries, salt marshes, and river mouths to forage and breed.	Nests on gently sloping sandy beaches, singly or in groups	None	None, Habitat not present
Green turtle <i>Chelonia mydas (incl. agassizi)</i>	T/	Worldwide in warm seas. On Pacific Coast, common as far North as San Quinton Bay, Baja California; Occasionally in San Diego bay and elsewhere along coast of California.	Usually aquatic, sometimes comes out on land to sleep on rocky sandy shores; lays eggs on gently sloping sandy shore that are habitually used for nesting.	None	None, Habitat not present
Brown pelican <i>Pelecanus occidentalis</i>	E/E	Present along the entire coastline, but does not breed north of Monterey County; extremely rare inland	Typically in littoral ocean zones, just outside the surf line; nests on offshore islands	Low	None, Habitat not present

Animals Potentially occurring 01-47480 Men 1 PM 38.5/38.8

Common Name	Legal Status*			Potential to	
Scientific Name	Federal/State	Distribution	Habitat Associations	Occur at the Project Site	Potential to be impacted by project
Bald Eagle <i>Haliaeetus leucocephalus</i>	T/E, FP	Nests in Siskiyou, Modoc, Trinity, Shasta, Lassen, Plumas, Butte, Tehama, Lake, and Mendocino Counties and in the Lake Tahoe Basin; reintroduced into central coast. Winter range includes the rest of California, except the southeastern deserts, very high altitudes in the Sierras, and east of the Sierra Nevada south of Mono County; range expanding	In western North America, nests and roosts in coniferous forests within 1.6 km of a lake, reservoir, stream, or the ocean	Low	None, no nesting habitat present
American peregrine falcon <i>Falco peregrinus anatum (nesting)</i>	--/E	Permanent resident along the north and south Coast Ranges; may summer in the Cascade and Klamath Ranges and through the Sierra Nevada to Madera County. Winters in the Central Valley south through the Transverse and Peninsular Ranges and the plains east of the Cascade Ranges	Nests and roosts on protected ledges of high cliffs, usually adjacent to lakes, rivers, or marshes that support large prey populations	None	None, Habitat not present
Western snowy plover (coastal) <i>Charadrius alexandrinus nivosus (nesting)</i>	T/SC	Winters along the coast from Del Norte County to San Diego County; breeding sites within this range are very limited. Nests at inland lakes throughout northeastern, central, and southern	Coastal beaches above the normal high tide limit with wood or other debris for cover. Inland shores of salt ponds and alkali or brackish inland lakes	None	None, Habitat not present
Marbled murrelet <i>Brachyramphus marmoratus</i>	T/E	Nesting sites from the Oregon border to Eureka and between Santa Cruz and Half Moon Bay; winters in nearshore and offshore waters along the entire California	Mature, coastal coniferous forests for nesting; nearby coastal water for foraging; nests in conifer stands greater than 150 years old and may be found up to 35 miles inland; winters on subtidal and pelagic waters often well offshore	None	None, Habitat not present

Animals Potentially occurring 01-47480 Men 1 PM 38.5/38.8

Common Name Scientific Name	Legal Status*		Distribution	Habitat Associations	Potential to Occur at the Project Site	Potential to be impacted by project
	Federal/State					
Western Yellow-billed Cuckoo <i>Coccyzus americanus occidentalis</i>	--/E		Nests along the Upper Sacramento, Lower Feather, South Fork of the Kern, Amargosa, Santa Ana, and Colorado Rivers.	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstay are preferred for foraging; may avoid valley-oak riparian habitats where scrub jays are abundant.	None	None, Habitat not present
Northern Spotted Owl <i>Strix occidentalis caurina</i>	T/SC		A permanent resident throughout its range; found in the north Coast, Klamath, and western Cascade Range from Del Norte County to Marin County	Dense old-growth or mature forests dominated by conifers with topped trees or oaks available for nesting crevices	None	None, Habitat not present
Point Arena mountain beaver <i>Aplodontia rufa nigra</i>	E/SC		Known only from Alder Creek in the Point Arena area of Mendocino County	North-facing, wooded slopes of ridges or gullies where there is abundant moisture, thick under-growth, and soft soil.	None	None, Habitat not present
Pacific fisher <i>Martes pennanti pacifica</i>	SC/SC		Coastal mountains from Del Norte County to Sonoma Counties, east through the Cascades to Lassen County, and south in the Sierra Nevada to Kern County.	Late successional coniferous forests and montane riparian habitats.	None	None, Habitat not present

Attachment 2

Plant List

Plants potentially occurring 01-474800 Men 1 PM 38.5/38.8

Scientific Name Common Name	Federal/State/CNPS	Distribution	Habitat Associations	Period (Blooms)	Potential to Occur at the Project Site	Potential to be impacted by project
<i>ARABIS MACDONALDIANA</i> McDonald's rock cress	E/E/1B	Del Norte, Mendocino, Siskiyou, Trinity, OR	Lower montane coniferous forest, Upper montane coniferous forest / serpentine	May-Jun	None	None, Habitat not present
<i>CHORIZANTHE HOWELLII</i> Howell's spineflower	E/T/1B	Mendocino	Coastal dunes, Coastal prairie, Coastal scrub / sandy	May-Jul	Low	None, not found in Environmental Study Limit
<i>ERIOGONUM KELLOGGII</i> Kellogg's buckwheat	C/E/1B	Mendocino County	Lower montane coniferous forest (rocky, serpentine)	May-Aug	None	None, not found in Environmental Study Limit
<i>ERYSIMUM MENZIESII</i> SSP. <i>MENZIESII</i> Menzies's wallflower	E/E/1B	Mendocino, Monterey	Coastal dunes	Mar-Jun	None	None, Habitat not present
<i>FRITILLARIA RODERICKII</i> Roderick's fritillary	--/E/1B	Mendocino	Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	Mar-May	Moderate	None, not found in Environmental Study Limit
<i>HOWELLIA AQUATILIS</i> water howellia	T/--/1A	Mendocino*, ID, OR*, WA	Marshes and Swamps (freshwater)	Jun	None	None, Habitat not present
<i>LASTHENIA BURKEI</i> Burke's goldfields	E/E/1B	Lake, Mendocino and Sonoma Counties	Meadows (mesic), vernal pools, 15-580 m elevation.	Apr-Jun	Low	None, not found in Environmental Study Limit
<i>LASTHENIA CONJUGANS</i> Contra Costa goldfields	E/--/1B	Solano and Napa counties	Vernal pools	April-May	None	None, Habitat not present
<i>LIMNANTHES BAKERII</i> Baker's meadowfoam	SC/R/1B	Mendocino	Meadows, marshes and swamps (freshwater), valley and foothill grassland (vernally mesic), vernal pools, 175-910 m elevation.	Apr-May	Low	None, habitat not present

<i>PLEUROPOGON HOOVERIANUS</i> North Coast semaphore	SCCE/1B	Mendocino, Marin and Sonoma Counties	Broadleaved upland forest, meadows, North Coast coniferous forest, vernal pools / mesic	May-Aug	Moderate	None, not found in Environmental Study Limit
<i>SEDUM EASTWOODIAE</i> Red Mtn. stonecrop	C/--/1B	Mendocino County	Lower montane coniferous forest (serpentinite soils)	May-July	None	None, Habitat not present
<i>TRIFOLIUM AMOENUM</i> Showy Indian clover	E/--/1B	Sonoma County	Low, rich fields and swales	Apr-Jun	None	None, Habitat not present

*** Status Explanations:**

Federal

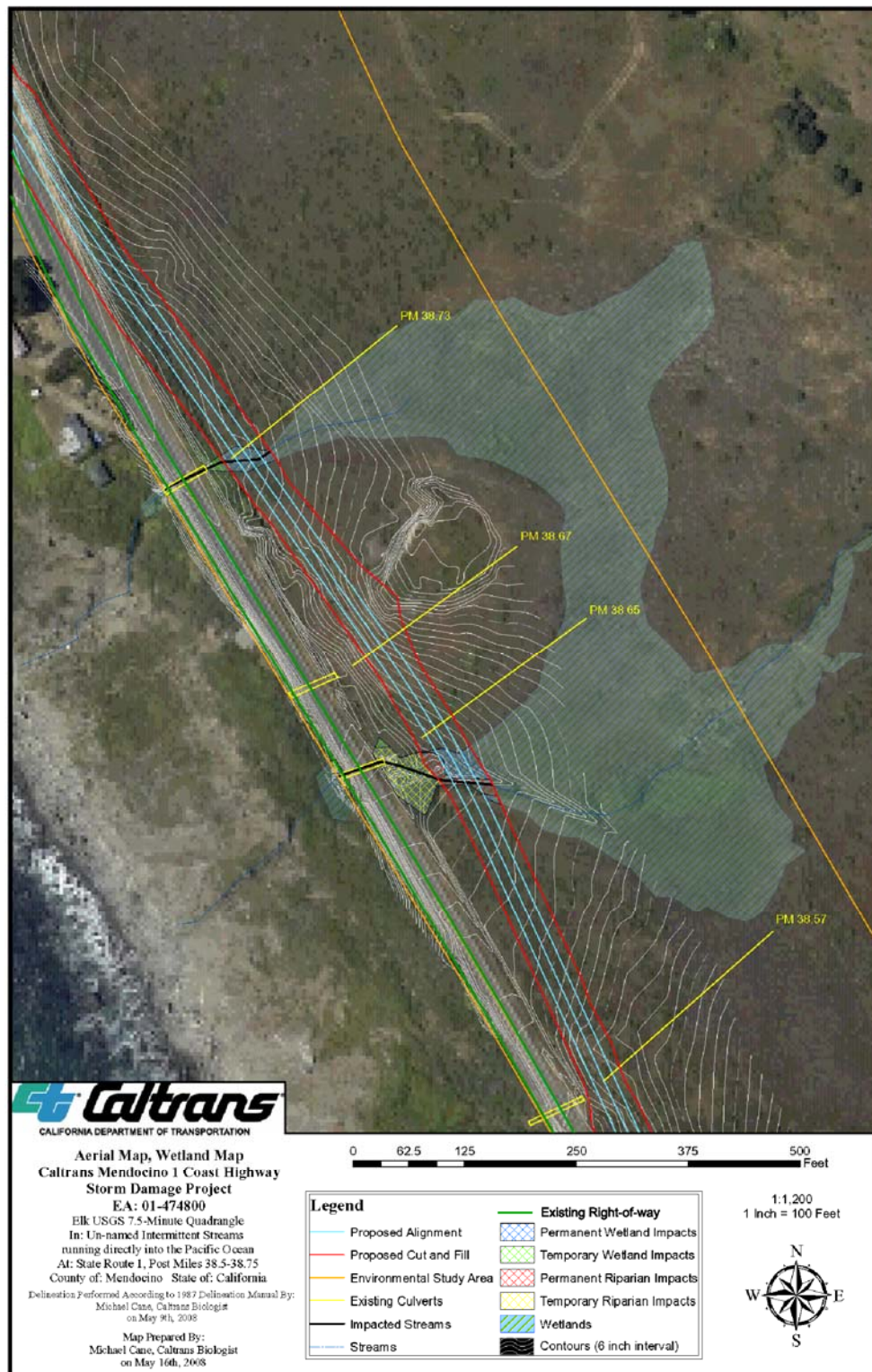
- = No status definition.
- E = listed as endangered under the federal Endangered Species Act.
- PD = proposed for delisting
- SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.
- T = listed as threatened under the federal Endangered Species Act.

State

- = No status definition.
- E = Listed as endangered under the California Endangered Species Act.
- FP = Fully protected species may not be taken or possessed without a permit from the FG Commission and/or the DFG. Information on Fully Protected species can be found in DFG Code Sections 3511, 4700, 5050, and 5515.
- SC = Species of special concern in California.

Attachment 3

Wetlands Impact Map



Attachment 4

Environmentally Sensitive Habitat Area Map

